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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/990,718	11/21/2001	James X. Hartmann	6818-26	3915	
5	7590 02/19/2004		EXAMINER		
Stanley A. Kim			NGUYEN, BAO THUY L		
Akerman, Sent P.O. Box 3188	terfitt & Eidson, P.A.	ART UNIT	PAPER NUMBER		
222 Lakeview	Avenue, Suite 400	1641	***		
West Palm Bea	ach, FL 33402-3188	DATE MAILED: 02/19/2004	4		



Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary		Applicat	Application No.					
		09/990,	718	HARTMANN ET AL.				
		Examine	er	Art Unit				
		Bao-Thu	y L. Nguyen	1641				
Period fo	The MAILING DATE of this commun or Reply	nication appears on th	ne cover she t with the	corr spondenc ad	idress			
THE - Exte after - If the - If NC - Failt Any	ORTENED STATUTORY PERIOD F MAILING DATE OF THIS COMMUN nsions of time may be available under the provisions SIX (6) MONTHS from the mailing date of this come period for reply specified above is less than thirty (3) period for reply is specified above, the maximum so the to reply within the set or extended period for reply reply received by the Office later than three months ed patent term adjustment. See 37 CFR 1.704(b).	IICATION. s of 37 CFR 1.136(a). In no emunication. 30) days, a reply within the statutory period will apply and y will, by statute, cause the ag	event, however, may a reply be a atutory minimum of thirty (30) do will expire SIX (6) MONTHS fro optication to become ABANDON	timely filed ays will be considered timel m the mailing date of this constant IED (35 U.S.C. § 133).				
Status								
1)	Responsive to communication(s) file	ed on 22 December	2003.					
2a)□	This action is FINAL . 2b)⊠ This action is non-final.							
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposit	ion of Claims							
5)□ 6)⊠ 7)□	Claim(s) <u>1-34</u> is/are pending in the 4a) Of the above claim(s) <u>8,9 and 23</u> Claim(s) is/are allowed. Claim(s) <u>1-7, 10-22</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restrict	3-34 is/are withdrawr						
Applicat	ion Papers							
<i>,</i> —	The specification is objected to by the							
10)	10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
	Applicant may not request that any obje	• ,	•	` '				
11)	Replacement drawing sheet(s) including The oath or declaration is objected t	=		=	• •			
Priority (ınder 35 U.S.C. § 119							
a)	Acknowledgment is made of a claim All b) Some * c) None of: 1. Certified copies of the priority 2. Certified copies of the priority 3. Copies of the certified copies application from the Internation	documents have be documents have be of the priority docum onal Bureau (PCT Ru	en received. en received in Applica nents have been receivule 17.2(a)).	ntion Noved in this National	Stage			
Attachmen	, ,							
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (F	PTO-948)	4) Interview Summar Paper No(s)/Mail I		••			
3) 🛛 Infori	nation Disclosure Statement(s) (PTO-1449 or r No(s)/Mail Date <u>3/22/02 & 6/18/02</u> .		5) Notice of Informal 6) Other:)-152)			

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DETAILED ACTION

Election/Restrictions

- **1.** Applicant's election without traverse of Group 1, claims 1-7 and 10-22 in Paper dated December 22, 2003 is acknowledged.
- 2. Claims 8, 9 and 23-34 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made without traverse in Paper dated December 22, 2003.

Claim Rejections - 35 USC § 103

- **3.** The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- **4.** Claims 1-7 and 10-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rossi et al., (Hybridoma. Vol. 11, No. 3. 1992, pp. 333-338) in view of May (GB 2,204,398).

Rossi discloses a field-portable immunoassay kits for sailfish using a monoclonal antibody conjugated to an enzyme label.

Rossi differs from the instant invention in failing to teach a lateral flow assay device using nitrocellulose and various reagents that are conventional in a lateral flow assay device such as gold sol label.

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May, however, teaches a kit comprising an assay device made of a hollow casing constructed of moisture-impervious solid material containing a dry porous carrier which communicates directly or indirectly with the exterior of the casing such that a liquid test sample can be applied to the porous carrier, the device containing a labeled specific binding reagent for an analyte which labeled specific binding reagent is freely mobile within the porous carrier when in the moist state, and unlabeled specific binding reagent for the same analyte which unlabeled reagent is permanently immobilized in a detection zone on the carrier material (page 3). The device contains a control zone is loaded with an antibody that will bind to the labeled antibody from the first zone. The control zone can contain an anhydrous reagent that when moistened, produces a color change or color formation. Or as an alternative, the control zone could contain immobilized analyte that will react with excess labeled reagents from the first zone (page 9). May teaches the use of direct labels such as minute colored particles, such as dye sols, metallic sols and colored latex particles (page 10). The metallic sols particles are in the range of about 20 nm in diameter (page 31).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to adapt the assay taught by Rossi to a paper lateral flow format such as taught by May because Rossi teaches that such adaptation would reduce the assay time and therefore increase productivity. Furthermore, May teaches that their device may be adapted for a variety of analytes and provides the advantages of a device suitable for use in the field that can provide analytical result that is rapid and requires a minimum degree of skill and involvement from the user leading to fewer errors.

Conclusion

- **5.** No claim is allowed.
- **6.** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bao-Thuy L. Nguyen whose telephone number is (571) 272-0824. The examiner can normally be reached on Tuesday and Thursday from 9:00 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long V. Le can be reached on (703) 305-3399. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bao-Thuy L. Nguyen

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17 February 2004